#### DOCUMENT RESUME

ED 133 169 SE 021 678

AUTHOR Stamps, B. J.; And Others

TITLE Development and Implementation of an Instructional

Services System in Mathematics and Science.

PUB DATE 76

NOTE 63p.: For related documents, see SE 021 679-681;

Contains occasional light and broken type

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.

DESCRIPTORS Curriculum; \*Curriculum Development; Elementary

School Mathematics; Elementary School Science; \*Elementary Secondary Education; \*Inservice Education; \*Mathematics Education; Program

Descriptions; \*Science Education; Secondary School Mathematics: Secondary School Science; Staff Role

ABSTRACT

This report gives details of the entire process of developing and implementing an instructional service system in mathematics and science. The procedures involved in revising and validating baseline documents, in selecting instructional and supervisory staff, in developing curriculum materials, and in running inservice teacher workshops are described. A calendar of events is provided. Evaluation methods are discussed. (DT)

#### US DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRO-DUCED EXACTLY AS RECEIVED FROM THE PERSOND RORGANIZATIONORIGIN. ATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE-SENT OF FICIAL NATIONAL INSTITUTE OF EDITICATION POSITION ON POLICY

AUG 1 9 1976

APR 5 1976

#### MAXI I REPORT ON

DEVELOPMENT AND IMPLEMENTATION OF AN

INSTRUCTIONAL SERVICES SYSTEM IN MATHEMATICS AND SCIENCE

by B. J. Stamps
Louis E. Moore
Daniel A. Rose

Submitted in partial fulfillment of the requirements for the degree of Doctor of Education, Nova University

= 021 678

Dallas II Cluster Dr. William Webster Maxi I Practicum March 1, 1976

# TABLE OF CONTENTS

	PAGE
LIST OF TABLES	ii
ABSTRACT	1
INTRODUCTION	2
PROCEDURE	3
Revision and Validation of Baseline Documents	3
Selection of Instructional and Supervisory Staff **	5
Curriculum Materials Development	16
Staff Development	20
CALENDAR OF EVENTS	27
EVALUATION	29
CONCLUSIONS	55
APPENDICES In alphabetical order	



## LIST OF TABLES

		PAGE
Table 1	PERCENTAGE SUMMARY OF RESPONSES FROM SIXTY-THREE D.I.S.D. SCIENCE TEACHERS PARTICIPATING IN INTRODUCTORY BASELINE SEMINARS, MARCH 3 - APRIL 18, 1975	30
Table 2	PERCENTAGE SUMMARY OF RESPONSES FROM SIXTY-SIX D. I. S.D. MATHEMATICS TEACHERS PARTICIPATING IN INTRODUCTORY BASELINE SEMINARS, MARCH 3 - APRIL 18, 1975	31
Table 3 .	NUMBER AND PERCENTAGES OF D. I, S.D. ADMINISTRATORS RESPONDING TO OPINIONNAIRE PRIOR TO BASELINE DOCUMENT PRESENTATION, JUNE 11, 1975	33
Table 4	NUMBER AND PERCENTAGES OF D. I. S.D. ADMIN- ISTRATORS RESPONDING TO OPINIONNAIRE FOLLOWING BASELINE DOCUMENT PRESENTATION. JUNE 13, 1975	35
Table 5	NUMBER AND PERCENTAGES OF D. I. S.D. PRINCIPALS RESPONDING TO OPINIONNAIRE FOLLOWING WORKSHOP ON TECHNIQUES FOR PRESENTATION OF BASELINE CONCEPTS, JULY 23, 1975	39
Table 6	NUMBER AND PERCENTAGES OF D. I. S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOW- ING SCIENCE BASELINE SEMINAR, AUGUST 13, 1975	41
Table 7	NUMBER AND PERCENTAGES OF D. I. S.D. MATHE- MATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR, AUGUST 13, 1975	44
Table 8	NUMBER AND PERCENTAGES OF D. I. S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOW- ING SCIENCE BASELINE SEMINAR, AUGUST 29, 1975	46



## PAGE

Table	9	NUMBER AND PERCENTAGES OF D. I. S.D. MATHE- MATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR, AUGUST 29, 1975	49
Table	10	NUMBERS AND PERCENTAGES OF D.I.S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOW- ING SCIENCE BASELINE SEMINAR, NOVEMBER 7, 1975	52
Table	11	NUMBER AND PERCENTAGES OF D. I. S.D. MATHE- MATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR,	53





#### ABSTRACT

The purpose of this practicum was to develop and implement an instructional service system in math and science. The need was demonstrated, the system was developed and implemented, and evaluation results demonstrated a successful process to select staff, develop curriculum materials, and develop and implement a staff development program to initiate such an effort in a system as large as Dallas. This entire process is detailed in this report for use of other systems in curriculum development.



#### INTRODUCTION

The purpose of this practicum effort was to develop and implement an instructional services system in the areas of math and science. Prior to this effort, no one division, department or staff member had the responsibility to speak with authority regarding the instructional program K-12. The consultant services were divided between the elementary and secondary operations department. There was no uniform curriculum model for teachers to use in the district.

With the formation of a new Instructional Services Department, a needs assessment was conducted that generated a set of recommendations regarding staffing, curriculum development, and implementation. These recommendations were accepted by the Executive Team and the Board of Education of the Dallas Independent School District. The implementation plan was to (1) validate and revise Baseline mastery objectives already developed, (2) select and appoint an Instructional Services supervisory staff, (3) develop curriculum materials from teacher-made units to assist students to achieve the mastery objectives, and (4) develop and implement a staff development program to orient teachers to the Baseline objectives and explain the process of developing teacher-made materials. These four steps are clearly stated in this practicum report along with an evaluation of the results.



## REVISION AND VALIDATION OF THE BASELINE DOCUMENTS

As part of an earlier effort a tentative description of the program of education desired for all children K-12 in each of the major subject disciplines had been written by a curriculum writing team. This educational continuum called the Baseline was approved by the Board of Education on February 15, 1975. It formed a basis for instruction at each level of learning, yet it is not a teaching manual, but a framework for learning expectations.

Since the Baseline is the foundation upon which the new instructional program was to be based, it was necessary to develop understanding of and commitment to this framework. The strategy used to improve the Baseline and to gain the commitment of parents and professionals alike was to begin an extensive review and revision process designed to permit publication of the revised Baseline in June.

February 27. Submission of Baseline Documents, Baseline documents in the various subject areas were disseminated to principals and teachers for review and comment. One set of the six documents was sent to each principal and to the parent advisory committee and individual documents were sent to the 180 teachers on the review team for each instructional area. These documents were to be used to orient teachers and parents in preparation for the Baseline hearings to be conducted on March 27.

February--March. P.R. Slide Tape Presentations, A slide tape presentation outlining the intent of the Baseline was prepared and used in numerous reviews and discussion sessions with faculties and community groups. Additionally, members of the instructional services staff reviewed and discussed the baseline revision process at the regular and area principal's meetings.



February -- March. Consultants, With the assistance of Dr. Francis Chase, Dean Emeritus, Graduate School of Education, University of Chicago, a number of outside consultants were utilized by each of the curriculum writing teams. To refine the existing documents and to prepare reactionaires for teachers and parents to use in making contributions for consideration in the Baseline revision.

March 11. <u>Curriculum Advisory Council</u>, The Curriculum Advisory Council, composed of seventy students, parents, and educators, reviewed the development of criteria for review and discussion of the Baseline documents. The curriculum writers met with various sub-committees of this council to give a progress report and to receive feedback for revision. In effect, this full day session was a preview of and preparation for the hearings that were to follow.

March 27. Teacher Hearings 1:30-4:00, Simultaneous hearings for input and feedback were held for 180 teacher representatives in each major subject discipline from each building at six locations. These hearings, which were well attended, provided extensive feedback that was used as a basis for revising the Baselines.

April--May. Revision. The Baselines were revised extensively based upon the ideas generated through the discussion and hearings. The revised documents were approved by the superintendent and the board of education for field testing during the 1975-76 school year and presented to the principals on June 1 in preparation for the administrative workshop. A copy of the math and science Baseline is included as appendix A and B.



# SELECTION OF INSTRUCTIONAL AND SUPERVISORY STAFF

The instructional services department was established to coordinate all instructional services under one department. Specifically, the department was charged with three basic services: (1) curriculum renewal as it relates to the "operational curriculum," (2) instructional improvement, technical assistance as it relates to teaching techniques and strategies, and (3) instructional resources as related to the process of screening, reviewing, selecting, adapting and disseminating instructional materials. Since all these functions were already being performed by other departments, it was necessary to establish the function and role of the elementary/secondary operations departments and the new instructional services department.

- ). reparation for the reorganization, a set of principles regarding the overall organization of the district was formulated. These were:
  - 1. Resources to serve the schools should be located physically and philosophically as close as possible to the schools
  - 2. The principal is the instructional advocate in the school as well as the manager of all programs in his/her institution
  - 3. The principal needs specific instructional and management services in order to function effectively
  - 4. The principal's span of control and responsibility must be realistic
  - The principal needs management services designed to coordinate his school in consideration of district priorities
  - 6. Staff development goes forward best as people engage in solving real problems
  - 7. Staff members can function effectively while reporting to more than one superior



8. The primary delivery system for school services is the School Services Center.

Based upon the above guiding principles, the role and functions of the three departments were established as follows:

Instructional Services Department

### Primary Functions

- 1. Direct the revision, renewal and implementation of the District's basic instructional program.
- 2. Design and/or screen and select the instructional resources needed to implement the District's basic instructional program.
- 3. Plan and conduct the inservice staff development program needed to implement the District's basic instructional program.
- 4. Monitor and assess the District's basic instructional program at the school and district levels.
- 5. Provide to school staffs the technical assistance related to teaching techniques and strategies needed to improve the basic instructional program.
- 6. Provide assistance to the school staffs in developing the instructional portion of the program budget.
- 7. Identify curriculum and instructional needs that are unique to an individual building and assist in the curricular modification necessary to meet those needs.
- 8. Advise and counsel with school principals on the implementation of the basic instructional program.

## Cooperative Functions

- 1. Cooperate with Adaptive Education and the Program Development Department to develop, disseminate and implement programs for children with special needs.
- 2. Cooperate with all departments in developing the total instructional program budget.



- 3. In cooperation with Personnel Development and the Personnel Department, specify the instructional competencies needed and make recommendations regarding instructional personnel selection and assignment.
- 4. Cooperate with other departments to provide business and community assistance in the instructional program.
- 5. Assist the school operations departments in the accreditation of schools.

# Elementary and Secondary Operations Departments

#### Primary Functions

- 1. Provide school principals with the management and technical support assistance needed to implement the policies of the District.
- 2. Coordinate the day-to-day operational activities of all schools.
- 3. Monitor and assess the educational climate of each school and its community components.
- 4. Provide the necessary fiscal, personnel and material resources for local school program planning and implementation.
- 5. Expedite administrative management requests and maintenance needs from schools.
- 6. Evaluate the performance of school administrators and the programmatic efforts within each building.
- 7. Facilitate communication between local school principals and all District departments.
- 8. Advise and counsel with school principals on student, staff and community relations.
- 9. Provide for the quality of education necessary to surpass accreditation standards.



#### Cooperative Functions

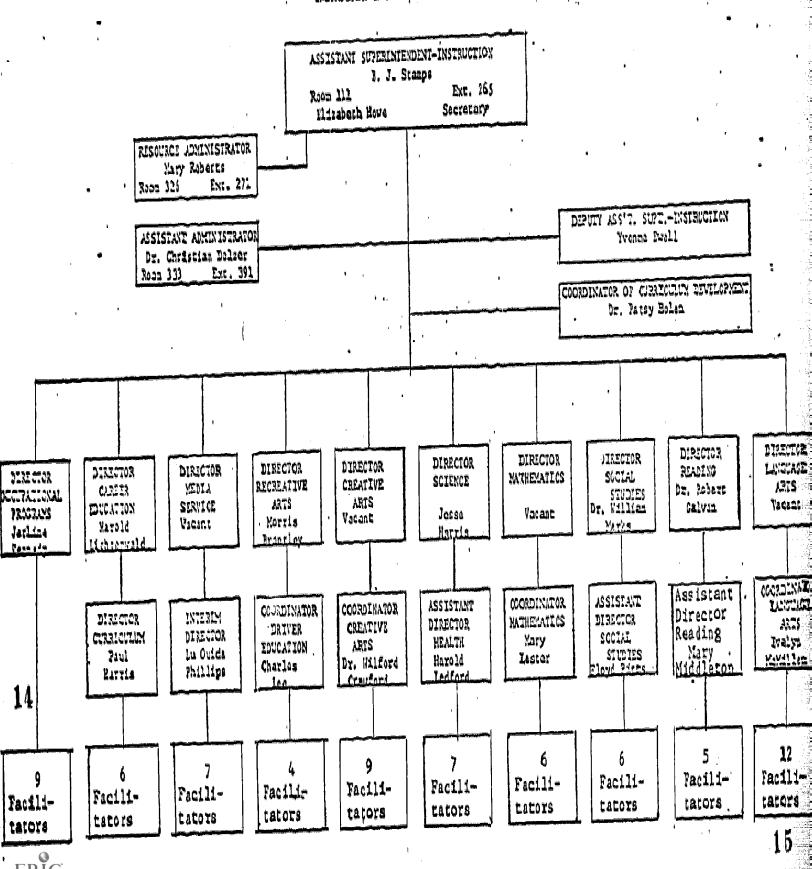
- 1. Cooperate with Instructional Services Department by supporting the efforts of that department to implement the basic instructional program.
- 2. Cooperate with all District departments in reducing any existing disparities among the schools.
- Assist Adaptive Education Department personnel in the installation of relevant alternative programs for students.
- 4. Cooperate with the Personnel Development Department in implementing a management leadership training program for school leadership personnel and the Affirmative Action Program for all personnel.
- 5. Assist the Program Development Department in expansion of bilingual, multicultural and compensatory education programs.
- Cooperate with all departments in effective utilization of the resources provided by the area School Service Centers.
- 7. Cooperate in the management of proven compensatory education programs.

Instructional Services Department, job descriptions for instructional directors and facilitators were developed and a staffing pattern established. (Figure 1) During the months of Marchand April the personnel department advertised nationally for outstanding educators to fill the open director and facilitator positions.

The job descriptions which were advertised attempted to communicate the professional qualifications desired, the duties and responsibilities, and reporting relationships of the various positions consistent with the guiding principles of the overall organization and role and function of the Instructional Services Department. An example of these job descriptions follows:



# INSTRUCTIONAL SERVICES DEPARTMENT



figure\_

#### JOB DESCRIPTION

DIRECTOR. (	•	
-------------	---	--

## (1) Appointment and Qualifications

The Instructional Services Subject Matter Area Directors will be recommended to the General Superintendent by the Assistant Superintendent-Instructional Services. Each candidate must meet the following qualifications:

- (a) Earned Doctor's Degree, or equivalent hours and/or five years supervisory experience in the Dallas Independent School District.
- (b) Five years experience as a classroom teacher and three years experience in a position of instructional or development leadership.
- (c) Supervisor's Certificate or equivalent.
- (d) Demonstrate knowledge of curriculum design and evaluation processes.
- (e) Be cognizant of the latest advances in instructional program development and supervision.
- (f) Must have appropriate subject matter area of specialization in one or more degrees.

## (2) Basic Functions

- (a) Interprets and implements school district policy, methods and procedures as they relate to the ( ) curriculum and Instructional Program.
- (b) Directs the development and implementation of the (instructional program K-12.
- (c) Supervises the dissemination and implementation of (teaching techniques and instructional materials.
- (d) Assist in the planning of staff development activities for all instructional personnel in the field of ( ).
- (e) Directs and monitors the district-wide ( ).
- (f) Participates in the evaluation of the ( ) instructional program and teaching personnel.
- (3) Reporting Relationships:
  - (a) Reports directly to:

    Assistant Superintendent-Instructional Services



In the Instructionrelated area of:

<b>(</b> b)	Also works with:	
(-,	Assistant Superintendent-	
	Personnel Development	Staff Development
	A i - tout Superintendent-	Operations and
	Assistant Superintendent-	Management
	Elementary/Secondary	4,14,14
	Assistant Superintendent-	•
	Program Development	New Programs
	Program Development	:
ı	Other Instructional Directors	Coordination of
	Other Instructional Directors	Instructional
		Programs
	Principals	Instruction
	Assistant Principals	Tile of de profit
	Operations Directors	Operations and Management
		in the Area of:
(c)	Person (s) Directly Responsible for:	in the Area of:
	Instructional/Curriculum Facilitators	
		Instruction
	(K-12	
Duti	es and Responsibilities	
	the second and implem	entation
(a)	Directs the revision, renewal and implem	2374
	of the District's basic instructional progr	<del>4111</del>
	± /	

## (4)

- Coordinates the selection of the instructional (b) resources needed to implement the Basic instructional Program in (
- In conjunction with the Director of the Area (c) Centers, coordinate the delivery of quality ) instructional services to the teachers at the classroom level.
- Advise and consult with the principals on the (d) ) instructional implementation of the ( program.
- Coordinates the planning, development, implemen-(e) tation, and evaluation of a quality ( education program.



(f) Consult with principals concerning the Instructional portion of the Program Budget.

# (5) Terms of employment

ij

231 days
Salary and car allowance on schedule. (\$19,000--26,000)



#### JOB DESCRIPTION

## INSTRUCTIONAL/CURRICULUM FACILITATOR:

### (1) Appointment and Qualifications

The Instructional/Curriculum Facilitator will be recommended to the General Superintendent by the Assistant Superintendent-Instructional Services, after consulting with the appropriate Subject Area Director. Along with an overall excellent rating the candidate for this position must meet the following qualifications:

- (a) Master's Degree in field of Specialization.
- (b) A minimum of five years of DISD teaching experience in area of specialisation.
- (c) Must have demonstrated competence as a classroom teacher and exhibited leadership qualities and skills in interpersonal relationships.
- (d) Must possess knowledge of latest developments in fields of specialization.
- (e) Be willing to participate in the Leadership Training Program for Instructional and Supervisory Personnel.

#### (2) Basic Functions

- (a) Maintain an awareness of the current state of the art in instructional techniques and strategies and demonstrate these innovative practices to classroom teachers.
- (b) Work directly with the building principal, the building instructional officer and their staff to improve instructional techniques and practices of teachers within a single school.
- (c) Assist the classroom teacher in the identification and utilization of new teaching techniques and strategies.
- (d) For two weeks each December and during the entire months of May and June, the Instructional/Curriculum Facilitator will be totally involved in the design, revision and evaluation process of the District's mainstream curriculum.

## (3) Reporting Relationships

Reports Directly to:
Subject Area Instructional Director

In the Area of:
All matters concerning
the how, what, and why
of teaching and learning.



Also works with:

Building Principals
Building Instructional Officers
Classroom Teachers

In the Area of:
Instruction

## (4) Duties and Responsibilities

(a) To provide technical assistance to the Principals, assistant principals, team leaders, and classroom teachers in implementing the Instructional Program.

(b) Makes classroom visitations of instructional personnel, provide follow-up consultation, and assist in locating adequate resources for helping in the teaching process.

(c) Help to plan and conduct the inservice staff development program needed to implement the District's basic instructional program.

## (5) Terms of Employment

220 days. Teachers' salary extended - index 1.02 . Car allowance on schedule for district-wide personnel



As a result of the advertisement of the positions, twenty-two mathematics and sixteen science applicants were identified who fully met all the qualifications. After each of the candidates were interviewed by an administrative team, nine science and seven mathematics staff members were employed by the Board of Education on June 29, 1975.



# CURRICULUM MATERIALS DEVELOPMENT

Concurrently with the revision of the Baseline, a major curriculum development effort was started to develop examples of materials that teachers could use to implement the intent of the Baseline. A goal to provide examples of teaching materials for at least two objectives at each level of learning by June 30 was established. These materials would be used as examples to facilitate the effort to involve all teachers in the materials development process during the 1975-76 school year.

In preparation for involving teachers in the materials development process; the four writers in each of the science and math teams received extensive curriculum development training during the month of February. To coordinate the training effort and to provide continuing leadership, a curriculum specialist was named as assistant director-curriculum development.

The Baseline provides the framework for the DISD program of materials development. The mastery objectives found in the Baseline identifies the concepts, skills, and attitudes students are expected to have. Each curriculum unit begins with a statement of the mastery objective which communicates the student outcomes.

Two basic principles guided the development of the curriculum model or format. These were: (1) the process must enable all teachers to contribute ideas and materials without being a curriculum development specialist, and (2) the resulting materials must be readily usable in the schools without massive retraining of the teaching staff being necessary. Figure 2 is an example of the format that was established for materials development.



The curriculum materials development process was divided into three phases. Phase 1--an educational excellence (EE) program for sixty-three science and sixty-six math teachers and team leaders was established in cooperation with the personnel development department. These leaders were released from school for eight days during February and March for the purpose of (1) receiving orientation to the curriculum development thrust of the District (2) receiving specific training to develop the basic competencies needed to assist in the curriculum development process, (3) developing leadership skills in the areas of communication, problem solving techniques, group dynamics, and human relations, (4) making input into the revision of the Baseline and (5) beginning the development of the examples of the materials for implementation of the intent of the Baseline curriculum.

For orientation and training listed in purposes 1-3, these leaders were involved in a single three-day seminar. A copy of the agenda for these sessions is included as appendix C. For the five days of Baseline revision and materials development, the participants were divided into small groups based upon subject matter and grade level. These five-day seminars which were spread over the whole month of March afforded an opportunity for the participants to have extensive one to one contact with the curriculum writers.

Phase II, thirteen of the EE participants were employed during the month of June to complete the development of the examples of materials, at each level of learning. Materials for mathematics—level three are included as appendix D. In addition to developing the materials, these teachers were trained to serve on the leadership team who would lead the total staff in the materials development process during Phase III.



Objective:	Bran	nch:
	Lear	rning Level/Course:
		gested Time:
on - What should student say,	write, or do as a result of completing act	tivities:
		14
Focus	Ideas	Resources/Materials
	•	
	•	
,		
. ]	,	
	,	
, '	•	
		25
		•
	•	FIGURE 2



Phase III, in August, a leadership team composed of selected principals, teacher leaders from the EE program and instructional services staff, oriented all math and science teachers regarding the use of the Baseline and the examples of materials that were developed in June. Through a series of three full days of released time and five two-hour sessions conducted on days when students were released early, these teams provided leadership to enable all teachers to participate in the curriculum materials development process during the first quarter of the school year. Using the examples of materials produced in June as a guide, all teachers contributed ideas and materials that they had found useful in assisting students to achieve the objectives outlined for each level of learning in the Baseline.

During the month of December, the instructional services staff used the ideas and materials generated by the teachers to develop materials for implementation. All these materials will be printed and placed in the media center in the schools for use by the teachers as idea banks. During the 1976-77 school year, the best of the ideas from the banks will be used to develop a curriculum guide for each level of learning. Each guide will contain ideas spanning the range of high, medium and low sophistication for each objective listed in the Baseline.



#### STAFF DEVELOPMENT

In planning the staff development effort of this practicum, the major emphasis of leadership was placed on the school principal. In the Dallas Independent School District the principal is the instructional leader of his building. It is very important that he take the leading role throughout the district in this curriculum revision process.

An administrators' workshop was scheduled for June 11-13, 1975, which all Central Staff members, Principals, Deans of Instruction, Assistant Principals, and Administrative Interns attended at D. A. Hulcy Middle School. It was necessary that some prior planning with key principals be held before the workshop. Meetings were held on June 4, 1975, with specific building principals who would be leading the discussion groups in the workshop (Appendix E). Besides the principal, these meetings were attended by an Executive Team member and two Instructional Services facilitators.

In these meetings it was explained that the principal would take the leadership role in the workshop, the Executive Team member would give support, and the facilitator would give the technical assistance needed to orient all the administration.

The workshop would serve three main purposes regarding the Baseline.

They were:

- (1) Review and study the content and structure on the Baseline documents.
- (2) Initiate plans for utilizing the Baseline documents for the 1975-76 school year.
- (3) Suggest ways in which support personnel can best serve the schools to implement the Baseline document.



During the three-day workshop, a major portion of the time was given to Baseline orientation. (Appendix F) Most of the first morning of the session was given to operations problems, the General Superintendent kicked off the session with a speech designating the 1975-76 school year as "The Year of Instruction." B. J. Stamps, Assistant Superintendent of Instruction, introduced the Baseline documents to the principals.

After lunch on the first day, the key principals, who had met the week prior to the workshop, held a panel discussion in the auditorium. The focus of the discussion was on the principal's role in instructional improvement. The building principal is the key to success of any program in the school, whether it be instructional or extra-curricular.

After the panel and during the next two days, the administrators attended six small group sessions that lasted approximately one hour each. The administrators were divided into twelve groups (six elementary, three junior high, and three high school). In the small group sessions, an Executive Team member served as a leader for each group. This was done to give emphasis to the seriousness of the project. The previously selected panel of principals and other key principals presented each document with assistance from the facilitators. The purpose was to review in-depth each Baseline document with a view of developing a strategy for implementation beginning in July, 1975. The workshop was ended with a feedback session, led by the General Superintendent, from each small group session. The feedback was excellent and an air of enthusiasm existed among the workshop participants.

During the summer, <u>Professional Growth Plan Process 1975-76</u> was developed (Appendix G) which explained the processes to be used by the leadership teams to orient teachers on Baseline and to retrieve teacher-made materials to fit the Baseline objectives. Also, <u>Professional Growth Calendar of Activities 1975-76</u>



was developed (Appendix H), which outlined the schedule of the curriculum development process for the 1975-76 school year.

Based on the enthusiasm exhibited from the Administrators' Workshop, it was decided to proceed with a Lædership Team concept to (1) orient teachers to the Baseline and (2) to implement strategy and techniques for teacher participation in curriculum development activities. The Leadership Team concept is the outcome of the Dallas Independent School District philosophy, that is, the instructional personnel at the local building level are in the key positions for assessing the needs of students and thereby are the crux of instructional improvement with the principal as the catalyst. While the District now has a framework for instruction as set forth in the Baseline curriculum, alternative materials and strategies for implementation will be developed to operationalize the intent of the baseline.

The 1975-76 Professional Growth Program relates the local building activities to district job-alike sessions which will be coordinated by the Leadership Team comprised of principals, deans of instruction, teachers, resource and instructional personnel, media specialists, counselors, and psychologists. The focus of each session will be the sharing of ideas developed in the local buildings and developing plans and strategies for further development and implementation. The role of the leadership team is to articulate the needs of the group and to guide the group's efforts in accomplishing the goals of the Professional Growth program.

Fifty-three leadership teams, (eight teams in senior high, eight in junior high and nine in each of the four elementary school areas), were selected. These teams were given the responsibility of orienting the teachers and implementing the process for teacher participation in the curriculum development. The teams were divided up in specific subject and geographical areas. Of course, our main interest was in the areas of math and science, even though the staff development process was designed for all the disciplines.



Seven staff development days were allotted for the purpose of orientation and implementation of the Baseline curriculum revision process. Three days were set aside prior to the opening of school (August 12, 13, 14, 1975) and five more scattered out during the first two quarters of the school year (August 29, November 7, November 14, February 26, and February 27, 1976.) Also, there were designated early release days (school released at 2:00 p.m. instead of the regular 3:30 p.m. dismissal time). Out of the seventeen days, eight were designated for Baseline curriculum revision and the other seven to other staff development activities. These days were set aside for local building use to utilize personnel development or Instructional Services staff persons to work with teachers or to conduct joint meetings with neighboring schools sharing common needs, goals, and professional interests. The total effort for the year was to take place on these dates, therefore, time was utilized carefully.

During the July Principal's Conference (July 21 to July 28), principals (all principals either chaired or were part of the leadership teams) and Instructional Service staff members met in small groups to establish an agenda and procedure for the first professional growth meetings with the teachers on August 12, 13, and 14. Other leadership team members were oriented prior to and/or during the August 12, 13, and 14 Baseline Seminars. The principals were also oriented on the Professional Growth Plan Process 1975-76 and Professional Growth Calendar of Activities.

During the three days of August 12, 13, and 14, fifty-three Baseline seminars were held in specific areas and in geographical sections of the city. This was done to facilitate transportation. For instance, there were four different mathematics seminars (elementary) held in different sections of the city and one junior high session and one high school session. The same process was used for science and other disciplines.



The leadership teams were responsible for these sessions. They, with the assistance from the Instructional Services staff members, set the agendas and secured the resources necessary for the seminars. The main purpose of these three days was to orient the teachers on the Baseline mastery objectives and to explain the retrieval system to be used for curriculum revision.

The most important part of these sessions was to explain to the teachers the retrieval system. This would be the process in which teachers would take the Baseline mastery objectives and design units that they could use to enable the students to achieve that objective. The terms being used were explained to the teachers as follows:

- (1) <u>Mastery objective</u> communicate the student outcomes. Mastery communicates levels of achievement not grade level mastery.
- (2) Evaluation identifies what the student should be able to do to exhibit understanding or skill of the mastery objective.
- (3) Focus a scope and sequence of concepts, skills, or content the student must know or be able to do in order to reach the mastery objective.
- (4) Ideas teacher-developed ways of reaching items listed in the focus column. These are only suggestions. Any teacher may develop alternatives.
- (5) Resource Materials identifies the content information or items needed to teach the ideas. Attachments are referenced in the resource materials column and are attached at the end of the unit along with the unit bibliography.

In summary, the Baseline mastery objectives developed last year (also with teacher input) were given to the teachers in book form. They would pull a



mastery objective out of the book and write it on the retrieval form. The teachers then would develop the evaluation, focus, ideas, and resources needed to achieve the objective. This would be the same as an instructional unit.

After this was explained, the steps in the retrieval system were explained to the teachers. This would be the process for developing and finishing the teacher-developed materials. This was called the <u>People Power Process</u>. This process outlined the responsibilities for each person in the retrieval and curriculum development effort. They were as follows:

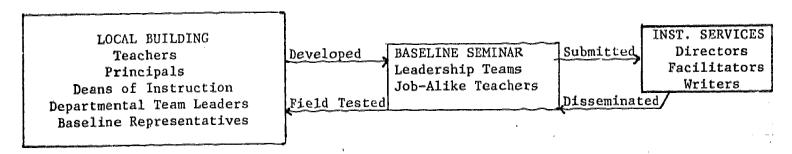
- (1) Principal serves as the instructional leader of the school. Develops the local building plans for Professional Growth sessions in the local building.
- (2) Dean of Instruction works with and through the principal to carry out the local building Professional Growth Plan. Plans with principal to develop strategies for improving instruction in the local building.
- (3) Department Team Leaders (Department Chairpersons) work with teachers to review and revise materials to submit to Dean of Instruction.
- (4) Baseline Representatives work with teachers on development and communicates teacher concerns and suggestions regarding leadership teams and Instructional staff.
- (5) Teachers submit materials developed in local building to, leadership team. Teachers will be involved in development, implementation, and refinement of Baseline materials.
- (6) Directors (Instructional Services Directors) will organize Facilitators (Instructional Services Consultants) to support efforts in the local buildings. Will review all development in areas of responsibility before inclusion in the Baseline materials.
- (7) Facilitators will support the development in the local buildings and review the materials selected for inclusion in the Baseline.



(8) Curriculum writers - will take teacher developed materials and develop Baseline II (an idea book for teachers that would be similar to a curriculum guide).

The following table shows in brief how the materials would flow in the

#### Flow of Materials:



The next item was to explain the time lines that would be followed for the After the August 12-14 Baseline seminars, each teacher 1975-76 school year. would return to the August 29 Seminar with one objective completely finished, with The teachers were assigned different evaluation, focus, ideas and resources. Teachers were encouraged to do more than one objectives to prevent duplication. if they desired and many did. One third of the objectives were assigned for The next one third were scheduled to be turned in on November 24, and the last one third to be turned in on February 26, 1976. The November 7 Seminar was specifically for Baseline representatives to hash out problems in the retrieval There was some concern on the number of units to be completed. communication problems caused some teachers to think they were supposed to develop This This would have been an insurmountable task. units for all objectives. was quickly cleared up and progress proceeded.

After all the materials are turned in in February, the writers will then refine and codify the materials and publish them prior to the 1976-77 school year. They will then be used and further refined to develop quality instructional curriculum guides.



#### CALENDAR OF EVENTS

February 15, 1975

•

February and March

February and March

March 11

March 27

March and April

April and May

June 4

June 11-13

June 29.

July

July 21-28

August 12, 13, 14

August 29.

Baseline approved by the Board of Education.

Slide-Tape presentation presented to faculty and community group.

Consultants used to refine existing Baseline documents.

Curriculum Advisory Council reviewed Baseline documents.

Teacher Hearings on Baseline documents.

Advertised nationally for personnel to staff position of Directors and Facilitators.

Revision of Baseline Documents based on input from consultants, Curriculum Advisory Council, and teachers.

Meetings with key principals that assisted in its Administrators workshop from June 11-13, 1975

Administrators workshop at Hulcy Junior High to orient principals to the baseline.

Employed nine science and seven mathematics staff members.

Development of Professional Growth Process Plan 1975-76, and Professional Growth Calendar of Activities 1975-76.

July Principals Conference to orient principals to Professional Growth Process Plan and Calendar of Activities.

Baseline Seminars to orient teachers . to Baseline and Curriculum Development process.

One-third of curriculum materials collected in Baseline Seminar.



November 7

November 14

December 1975

Baseline representatives met to discuss problems as to the development of Instructional units.

Baseline Seminar to demonstrate materials and collect the second one-third of the teacher-developed units.

Units turned in were refined and put together.



#### EVALUATION

Since this practicum involves an ongoing procedure of curriculum revision, the evaluative program has been one of process evaluation at each stage linked to needs assessment in terms of succeeding stages. In order to get the most far-reaching input all participants were included in each opinion-naire. It was decided that use of random sampling might omit valuable commentary.

Each major stage in the implementation of the practicum will be addressed separately in order to give a complete picture of the progressive steps involved. Since activities varied as the program developed, the format of this report will vary accordingly.

March 3 - April 18, 1975 - INTRODUCTORY BASELINE SEMINARS

During this period sixty-three science and sixty-six mathematics
teachers each participating in a five-day workshop, responded to
a questionnaire on a pre and post basis. In terms of beginning
teacher-level participation in the Baseline effort, this first step
was designed to initiate leaders into the philosophy of the Baseline
and to begin development of plans for involvement of the entire
teaching staff of the district.

The results of this survey are presented in Tables 1 and 2.



TABLE 1

PERCENTAGE SUMMARY OF RESPONSES FROM SIXTY-THREE D. I. S. D. SCIENCE TEACHERS PARTICIPATING IN INTRODUCTORY BASELINE SEMINARS MARCH 3 - APRIL 18, 1975

	•	%		% Post	
	,	Pre YesNo		Yes No	
	· ·	100			
1.	I am aware that DISD has an extensive program designed to improve the curriculum.	100	0	100	0
2.	I feel that I could write a good science curriculum for DISD at this time.	41.2	58.8	60.3	39.7
3.	I feel that individual curriculum writers are more effective than groups of curriculum developers.	11.1	88.9	17.4	82.6
4.	I am familiar with group problem solving techniques.	65.1	34.9	87.3	12.7
5.	I have been involved in other group problem solving situations.	65.1	34.9	73.0	27
6.	I need exposure to additional teach- ing techniques and strategies in order to become a really effective teacher.	85.7	14.3	79.4	20,6
7.	I would rather leave all curriculum writing to a staff of trained experts.	17.5	82.5	12.7	87.3
8.	I feel that the DISD has the best possible curriculum in math and science at this time.	14, 3	85.7	12.7	87.3
9.	I feel that the best use of my time is in the classroom with my students rather in attendance at outside staff programs.	28.6	71.4	20.6	79.4
10.	I think that the Baseline Document program will ultimately provide a better teaching situation for me and my fellow DISD teachers.	93.7	6.3	98.4	1.6

TABLE 2

PERCENTAGE SUMMARY OF RESPONSES FROM SIXTY-SIX
D.I.S.D. MATHEMATICS TEACHERS PARTICIPATING IN
INTRODUCTORY BASELINE SEMINARS
MARCH 3 - APRIL 18, 1975

		% Pre		% Post	
		Yes	No	Yes	No
1.	I am aware that DISD has an extensive program designed to improve the curriculum.	100	0	100	0
2.	I feel that I could write a good math curriculum for DISD at this time	50	50	56, 1	43.9
3.	I feel that individual curriculum writers are more effective than groups of curriculum developers.	21.2	78.8	21.2	78.8
4.	I am familiar with group problem solving techniques	56.1	43.9	77.3	22.7
5.	I have been involved in other group problem solving situations	60.6	39.4	80.3	19.7
6.	I need exposure to additional teaching techniques and strategies in order to become a really effective teacher.	86.4	13.6	o5.2	34.8
7.	I would rather leave all curriculum writing to a staff of trained experts.	21.2	78.8	18.2	81.8
<b>გ</b> .	I feel that the DISD has the best possible curriculum in math and science at this time.	7.6	92.4	16.7	83.3
9.	I feel that the best use of my time is in the classroom with my students rather than in attendance at outside staff programs.	47.0	53.0	10.6	89.4
10.	I think that the Baseline Document program will ultimately provide a better teaching situation for me and for my fellow DISD teachers.	89.4	10.6	95, 5	4.5

It can be seen from the data presented in Tables 1 and 2 that
the teachers involved in the workshops recognized a need for improvement in the mathematics and science curriculum (note item 8),
and exhibited a willingness to work within the framework of the
Baseline Document program (items 7, 9, and 10). The relatively
small number of teachers involved in this first series of workshops
limited the range of scores. However, in almost every item the post-test
responses indicated a positive trend.

June 11-13, BASELINE DOCUMENT PRESENTATION TO ADMINISTRATORS

On June 11, 1975, an opinionnaire was administered to principals and members of the central staff prior to an indepth presentation of the Baseline Curriculum Program. The opinionnaire and results are presented in Table 3.



NUMBER AND PERCENTAGES OF D.I.S.D. ADMINISTRATORS
RESPONDING TO OPINIONNAIRE PRIOR TO
BASELINE DOCUMENT PRESENTATION
JUNE 11, 1975

TABLE 3

<u>*************************************</u>		Number Responding	% Agree	% Disagree
1.	I have read the Baseline Documents prior to this time.	190	24.7	75.3
2.	I need further exposure to the details of the Baseline Document in order to function as an instructional leader.	200	99.0	1.0
3.	I would rather leave all curriculum matters to a staff of trained experts.	192	5.7	94.3
4.	I feel that the Dallas Independent Scho District's previous curriculum is in need of definition and improvement.	001 189	74.1	25.9
5.	I feel that the Baseline Document approach is a valid first step in the direction of curriculum revision.	198	97.5	2.5
6.	I have a number of questions and concerns about the Baseline Documen	169 .ts	91.7	8.3

### Specific Comments:

Most frequent and/or significant responses follow.

- 1. Career education should be treated as a concept rather than a program.
- 2. Hope classroom materials are available for teachers to use to achieve goals.
- 3. What a foolish web we weave.
- 4. Don't know enough yet to ask any questions.
- 5. Workshops orientation should be an ongoing process for input and output.



- 6. How do we measure in order to evaluate?
- 7. Please explain use and time to begin implementing Baselines.
- 8. This is a valid step in the right direction. No questions or comments at this time.

The responses to this opinionnaire indicate a ready agreement that curriculum revision is needed. Since only a few administrators had been involved up this time with the Baseline concept, items 2 and 6 are most indicative of the challenge ahead.

On June 13, 1975, following the final small group session in which the Baseline Documents were presented, all participants were again questioned by means of the post-opinionnaire summarized in Table 4. This post-test document terminated with three items specifically designed to give concrete guidance for planning the next stages of this curriculum revision process.

TABLE 4

# NUMBER AND PERCENTAGES OF D.I.S.D. ADMINISTRATORS RESPONDING TO OPINIONNAIRE FOLLOWING BASELINE DOCUMENT PRESENTATION JUNE 13, 1975

	•			
		Number Responding	% Agree	% Disagree
1.	I have read the Baseline Documents prior to this time.	200	29.0	71.0
2.	I need further exposure to the details of the Baseline Document in order to function as an instructional leader.	199	86.9	13.1
3.	I would rather leave all curriculum matters to a staff of trained experts.	195	10.3	89.7
4.	I feel that the Dallas Independent School District curriculum is in need of definition and improvement.	197	89.3	10.7
5 <b>.</b>	I feel that the Baseline Document approach is a valid first step in the direction of curriculum revision.	185	98.9	1, 1
6.	Many of my questions and concerns regarding Baseline Documents have been answered during this workshop.	196	92.3	7.7
7.	I feel that the proposed plan for implementation of the Baseline Document i sound.	e- 198 s	98.0	2.0

8. What questions and concerns do you have which can be addressed in the July workshop?

Most frequent and/or significant responses follow.

- a. Need reporting form to parents to go along with continuum.
- b. What resources will be available to each school?
- c. How do we help teachers "get a handle" on how to use the Baselines?
- d. I need more help in planning a presentation for my faculty.



- d. I need more help in planning a presentation for my faculty.
- e. Teachers in self-contained primary classes face too many Baseline Documents.
- f. If we do not convince teachers to go along, all this is lost.
- g. More role playing in the presentation of materials would be helpful.
- h. Parental exposure to this program in the form of workshops in individual schools may be helpful.
- i. Time will be needed to injest the Baselines. We have so much new materials coming in at once.

Administrators were quick to recognize, the importance of the Baseline concept. The volume and complexity of the materials tended to be overwhelming, but the need for this type activity was readily admitted.

Questions and concerns focused on the practical phases of implementation. There was no hesitancy to accept the principal's responsibility to carry the message to teachers.



A comparison of responses summarized in Tables 3 and 4 raises some interesting questions. Of particular note is item 1 which indicates that only 4.3 percent of those administrators who had not read the documents previously reported that they read them during the course of the workshop.

In terms of a recognized need for further exposure to details of the Baseline Document (item 2) there was a decrease from 99.0% to 86.0%.

This indicates a positive, but not overwhelming, increase in understanding.

On both pre and post-test responses to item 3, there was a strong reaction against leaving curriculum matters in the hands of specialists.

Item 4, faith in the current curriculum, was downgraded from 25.9% on the pretest to 10.7% on the post-test. This can be taken to indicate that the workshop presentation provided a strong set of alternatives for instruction.

The overall Baseline Document concept received overwhelmingly positive responses as indicated in item 5 (97.5% pretest and 09.9% (post-test).

Items 6 and 7 on the post-test might be considered as votes of confidence in the overall plan. These, taken along with item 8, served as a basis for development of the next steps in implementation.



July 23, 1975 - WORKSHOP FOR PRINCIPALS

Following two days of intensive discussion of techniques to be employed in presentation of the Baseline concept to all teachers, principals were asked to respond through an opinionnaire which can be considered of a post-test nature when paired with the June 13 survey.

The results of this survey of principals' preparedness appear in Table 5.

TABLE 5

NUMBER AND PERCENTAGES OF D. I.S.D. PRINCIPALS RESPONDING TO OPINIONNAIRE FOLLOWING WORKSHOP TECHNIQUES FOR PRESENTATION OF BASELINE DOCUMENTS

JULY 23, 1975

*		Number Responding	% Agree	% Disagree
1.	Do you understand the Leadership Team concept as it relates to the Baseline Curriculum plan?	213	99.5	0.5
2.	Do you understand the calendar for implementation of the Baseline Curriculum?	213	99.1	0.9
3.	Are you ready to present the Baseline concept to your faculty?	· 213	· 73.2	26.8
4.	Are you aware of the resources available to assist you in the implementation of the Baselia?	212	93.4	6.6
5.	Do you understand the role of the Area Directors and the Instructional Directors in relation to the Baseline?	213	94.4	5.6

- 6. List below any questions that are still unanswered for you.
  - a. Our group had a concern about 402 K-3 teachers reporting to one school. Would there be sufficient parking area? Sufficient seats? Would it not be better to divide by grades and meet in different schools?
  - b. When and how to find the time?
  - c. Have Directors pass out <u>one form</u> to get a count of materials distribution for each subject area.
  - d. Would like to secure additional directions or information on implementation of Baselines.
  - e. How shall we "sell" our diehards the "we've always done it", etc.
  - f. How can accountability be equalized with the Dean's role to ease tensions and raise morale?



Items 1, 2, 4, and 5 indicated an overwhelming acceptance of the Baseline concept by principals. The only area in which there was a decided hesitancy was in readiness to present the concept to school faculties (item 3).

Informal discussions following the response to this opinionnaire indicated that most of the principals who felt that they were not yet ready to present the material were of the opinion that they had received sufficient information, but needed additional time to organize themselves.

August 13, 1975 - FIRST GENERAL TEACHER BASELINE SEMINAR

Teachers participating in the Baseline Seminars on Math and Science gave input through an opinionnaire following the sessions. Of particular importance was the item requesting input on details that needed further clarification. This provided the basis for planning of the program to follow on August 29, 1975.

Summaries of this opinionnaire are shown in Tables 6 and 7.

TABLE 6

# NUMBER AND PERCENTAGES OF D.I.S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING SCIENCE BASELINE SEMINAR AUGUST 13, 1975

<del></del>		Number Responding	% Agree	% Disagree
1.	Has the philosophy of the Baseline been made clear to you?	372	92.7	7.3
2.	Were your questions and concerns answered?	332	89.5	10.5
3.	Were the facilities satisfactory?	338	94.1	5.9

- 4. What details do you want further clarified in the next session (August 29)?
  - a. More examples of how mastery objectives can be met with minicourses.
  - b. Complete list of mastery objectives.
  - c. Are we expected to complete certain mastery objectives by the end of each quarter?
  - d. Would like any suggestions on obtaining help in this endeavor from building principals, etc.
  - e. What specifically are we to do in writing these papers?
    How about a format for the writing?
  - f. What specifically must be taught each quarter?
  - g. Please clarify difference between instructional unit and minicourse.
  - h. If textbook resources are not in your building, where can they be found?
  - i. What to do about the slow child.
  - j. How can we make "individual student profile sheet" to follow the Baseline that will show a child's progress throughout the year?



### 5. Additional comments.

- a. Provide an agenda beforehand so that participants will be prepared to discuss specific items.
- b. Group size too large.
- c. List Dallas agencies where visual material available.
- d. Equipment and lab space is needed.
- e. Better planned than meetings in the past.



TABLE 7

### NUMBER AND PERCENTAGES OF D.1.S.D. MATHEMATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR AUGUST 13, 1975

		Number Responding	% g Agree	% Disag	ree
1.	Has the philosophy of the Baseline been made clear to you?	400	98.8	1.2	
2.	Were your questions and concerns answered?	390	92.3	7.7	
3.	Were the facilities satisfactory?	401	96.8	3.2	*,

- 4. What details do you want further clarified in the next session (August 29)?
  - a. Suggested time for each unit.
  - b. Suggestions on how to individualize.
  - c. Make the diagnostic test available now.
  - d. More stress that the mastery objectives are minimum and more teachers are at liberty to expand.
  - e. Are the mastery objectives listed in the order we are to present them?
  - f. Do we have to use the Baselines in our classrooms?
  - g. What level of mastery should be reached before checking off one concept and proceeding to the next?
- 5. Additional comments.
  - a. Need time to look over Baseline Instructional Units
  - b. I really feel the need on an individual continuum record card to be placed in the cumulative record folder of each student.
  - c. Need additional copies of the management systems.



- d. Would like to exchange ideas and experiences with other teachers at the next session.
- e. Please give us a printed sheet with all the names, addresses, and telephone numbers of the facilitators and coordinators and an example of the kinds of things that they can help us with.
- f. It was certainly nice to attend a well organized meeting where the material was delivered in a clear and concise manner and we were given sufficient time to get all of our questions answered.

With both science and mathematics teachers there was overwhelming acceptance of the Baseline concept. The slightly lower positive response to item 2, relating to questions and concerns, indicated a need for careful planning of the workshop to follow. This response, plus points raised in items 4 and 5, was considered a mandate to orient the August 29 workshop to specifics rather than overall philosophies.

August 29, 1975 - SECOND GENERAL TEACHER BASELINE SEMINAR

The opinionnaire designed for this session requested information, regarding satisfaction with handling participants' concerns. In addition, input for needed assistance before the November 7, 1975, session was requested. Results are summarized on Tables 8 and 9 which follow. It should be noted that some participants did not answer all questions.



TABLE 8

### NUMBER AND PERCENTAGES OF D.I.S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING SCIENCE BASELINE SEMINAR AUGUST 29, 1975

-	<u>ر بنشي</u>		£1.	Number Responding	% Agree	% Disagree
1.	foll	re yo owing	ur questions regarding the g concerns clarifies at this			
	a.	Mas	stery Objectives		1	
		(1)	Scope and sequence per quarter	194	68.8	31.4
		(2)	Relation to minicourses	184	88.6	11.4
	ь	Min	icourses	n se tito		1
	:	(1)	Format for writing	313	84.7	15.3
	-	(2)	Schedule for completion	303	83.2	16.8
		(3)	Allotment of teaching time per course	231	66.7	33.3
•		(4)	Availability of resources	145	73.8	26.2

- 2. List specific areas that require attention and/or clarification before the November 7, 1975, Baseline Seminar.
  - a. Will the units be taught sequentially throughout the District?
  - b. Explain in more detail what is expected of us.
  - c. What is the size of an instructional unit (weeks, days)?
- 3. List specific areas that should be addressed at the November 7, 1975, Baseline Seminar.
  - a. Mastery objectives and time limit for units to be worked on in classroom need clarification.
  - b. Will children be tested on the exact things in the unit guide?



- c. Accept additional mastery objectives.
- d. Where do we get outside resource material?
- e. Allotment of teaching time per course.
- f. How to obtain available minicourses.
- g. Possible future evaluation of teacher based entirely on Baseline Document.
- h. Specific responsibility of teacher toward Baseline.

#### 4. Additional comments.

- a. Would like to see more drug education in schools.
- b. I want to know sequences for the units.
- c. We encountered so much that I'll have to sort out what not to do for the year. Thanks.
- d. It is nice to be involved in something that can be used in the classroom.
- e. Not enough equipment and films for all teachers to do the same thing at the same time.
- f. I am concerned that this will be pretty much ignored in teaching.
- g. Our assignment for November 7, 1975, is clear, and I feel it will be a productive experience.

An examination of Table 8 shows that in relation to Mastery Objectives, 31.4% of the science teachers responding indicated a continuing concern over a need for clarification of scope and sequence of subject matter (item 1.a.(1)). This was pointed out again in item 2 dealing with specific areas to be addressed at the seminar on November 7, 1975.

There was a better understanding of the relation of minicourses to Mastery Objectives (item 1.a. (2)), however, at this point in time 11.4% negative indicates that many teachers are still uncertain of the concepts relating to this important phase of the program.

Item 1.b indicating concerns related to minicourses shows general understanding of format and schedule for completion of materials.

Teachers were less positive in matters relating to teaching time and availability of resources. These concerns are closely allied to the concerns voiced over scope and sequence.



TABLE 9

# NUMBER AND PERCENTAGES OF D.I.S.D. MATHEMATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR AUGUST 29, 1975

			Number Responding	% Agree	% Disagree
1.	foll	re your questions regarding the owing concerns clarified at this sion?			
	a,	Mastery Objectives			1
		(1) Scope and sequence per quarter	392	82.1	17.9
		(2) Relation to instructional units	396	98.0	2.0
	ъ,	Instructional Units			11
		(1) Format for writing	400	98.0	2.0
		(2) Schedule for completion	396	94.2	5.8
		(3) Allotment of teaching time per course	390	77.2	22.8
		(4) Availability of resources	94	81.9	18. 1

- 2. List specific areas that require attention and/or clarification before the November Baseline Seminar.
  - a. Allotment of teaching time per course.
  - b. Are the units supposed to be in the correct order for teaching?
  - c. Will we be able to work in our small groups again before we turn in our units?
  - d. Some objectives seem to be listed in the ideas column in the instructional units.
  - e. Need more clarification on schedule for completion.
- 3. List specific areas that should be addressed at the November 7, 1975, Baseline Seminar.
  - a. Allow more time to compare notes with others in our groups.



- b. Low level activities for remedial math classes.
- c. I would like to hear about some of the games and activities that are being submitted so we can use them this year.
- d. Availability of resources how much will the District pay for?
- 4. Additional comments.
  - a. Seminar very informative.
  - b. There is not enough time to get everything done.
  - c. New teachers need things that will help now, not later.
  - d. Give master teachers a chance to demonstrate their ideas.
  - e. More explanations were given as to how it is to be implemented. Questions asked at the first seminar that were not clearly answered were further explained in detail.

In general, responses of mathematics teachers presented in Table 9 were similar to those of science teachers presented in Table 8. There was less concern over scope and sequence, perhaps due to the systematic and generally accepted sequence of mathematical concepts as opposed to the varying philosophies regarding preferred sequence of scientific subject matter.

Again, there was a strong negative response to allotment of teaching time per course (22.8%), and to availability of resources (18.1%). The low number of responses to the question of available resources makes it difficult to assess the real degree of concern on this point.



Those suggestions that related to future activity were included in planning for the November 7, 1975, seminar.

November 7, 1975 - THIRD GENERAL TEACHER BASELINE SEMINAR

F or the final opinionnaire of this practicum, a series of
questions relating to overall attitude of teachers, current
status of the project, and input regarding next steps was
submitted to all participants. The results are summarized
in Tables 10 and 11.

TABLE 10

### NUMBER AND PERCENTAGES OF D.I.S.D. SCIENCE TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING SCIENCE BASELINE SEMINAR

NOVEMBER 7, 1975

	,	Number Responding	% Agree	% Disagre
1,	Please characterize your attitude toward this approach to curriculum revision.	ı		
	Is it innovative?	228	82.0	18.0
	creative?	365	87.4	12.6
	flexible?	381	91.6	8.4
	inspirational?	320	61.3	38.7
	needed?	367	89.4	10.6
2.	Do you feel your efforts will improve the final product?	386	83.4	16.6
3,	Are you satisfied with the current groupings of Mastery Objectives?	391	72.6	27.4
	In not, specify.			
	a. Many of the objectives were not compl	ete.		
	b. Some are too complex.			
	c. Some areas of science have been omit	ted.		
4.	Have the overall instructions been clear?	418	69.1	30.9

- 5. What specific areas still need clarification?
  - a. Mastery objectives should be stated in clear, simple language.
  - b. Time and materials needed to complete a unit.
  - c. Who will write final lesson plans to accompany each Mastery Objective?
- 6. What next steps do you recommend?
  - a. No more meetings complete units at school.
  - b. More sharing of ideas and pulling together.
  - c. Some people who are more familiar with Mastery Objectives to write them, and the focus and for us to do the activities.
  - d. Compile all the information and get it back to us quickly.
  - e. More time at school to work on assigned units.
  - f. Implement the plans we have made.



TABLE 11

# NUMBER AND PERCENTAGES OF D. I. S.D. MATHEMATICS TEACHERS RESPONDING TO OPINIONNAIRE FOLLOWING MATHEMATICS BASELINE SEMINAR NOVEMBER 7, 1975

		Number Responding	% Agree	% Disagree		
1.	Please characterize your attitude toward this approach to curriculum revision.					
,	Is it innovative?	297	86.5	13.5		
	c reative	483	73.7	26.3		
	flexible?	456	90. 1	9.9		
	inspirational?	378	61.6	38.4		
	needed?	432	87.3	12.7		
2.	Do you feel your efforts will improve the final product?	465	84.1	15.9		
3.	Are you satisfied with the current groupings of Mastery Objectives?	472	81.6	18.4		
	If not, specify.					
	a. Some resequencing needed.					
	<ul> <li>Eash school is different; cannot make set of Mastery Objectives f all.</li> </ul>	ór				
	c. Will not apply to another text.					
4.	Have the overall instructions been cle	ar? 466	84.8	15.2		
5.	What specific areas still require clar	ification?		the Committee of		
	a. Instructions on retrieval form.					



ъ.

When new books and supplies will arrive.

- c. What types of example ideas are needed in the units under the Ideas Column?
- d. Why are Mastery Objectives below grade level?
- 6. What next steps do you recommend?
  - a. Need more time to work on units in local building.
  - b. Want city-wide policy on sequencing of courses.
  - c. Continue evaluating teacher ideas.
  - d. Want each teacher to present what has worked for them.
  - e. Get something down on paper, and stick to it.
  - f. Workshop to make teaching aids.
  - g. More parent communication.
  - h. More samples of units given out.

An examination of the responses to this final opinionnaire

(Tables 10 and 11) indicates a strong recognition of the need
and innovative value of the Baseline Document. Eighty-four
percent indicated that they were convinced that their efforts
would improve the final product.

Although strongly positive, there was some implied criticism in terms of degree of dissatisfaction with Mastery Objectives and clarity of instructions. It is obvious that continued effort in perfecting the Baseline Documents must be expended.



As we pointed out in the introduction to this section of the practicum, evaluation has been a process effort, following from step to step through a complex curriculum revision procedure.

Input at each stage has been utilized in the planning and implementation of the next succeeding stage.





#### CONCLUSIONS

It is not possible to undertake a project of this magnitude and expect all parts of the machine to work without a breakdown. Although it is felt the program was successful in all areas, it is also reasonable to expect that certain problems were encountered. The problems are defined in the specific areas below:

(a) Communications - The big problem encountered in the leadership team strategy for materials development and implementation was lack of consistency in assignments across disciplines and grade levels. Many teachers were under the impression at the August 29 seminar that they were to turn in a unit for each objective. This would have been an impossible task and grumbles were frequent from the field. This misunderstanding was clarified before the November 7 workshop so that it was understood that each teacher was to do only one unit in the first quarter, one in the second quarter, and one in the third. Effectively, each teacher developed a minimum of three units. Teachers were encouraged to turn in more if they so desired and many did.

Processes for the development and retrieval of materials should have been communicated much more specifically from the Instructional Services Department through the directors to the leadership team.

(b) Instructional Services Staff Orientation - The Instructional Services

Department was staffed by adding all directors and facilitators on

June 29, 1975. Because of vacation schedules, these new staff members
actually began work on July 21. Orientation of principals to the leadership team concept began on July 23. If the new Instructional Services
staff members had been employed and trained earlier, many of the
problems encountered would have been diminished.



- (c) Selection of Leadership Teams Although the leadership teams performed beautifully in general, there were many who had problems. Teachers who were selected as Baseline representatives should have been the teacher members of the leadership team, but this did not prevail in all cases.
- (d) Input from Teachers Teachers felt in many cases that more emphasis was sometimes placed on quantity of input (teachermade units) rather than quality of input.
- (e) Relation of Special Program to Baseline There should have been more effort to relate the alternative (special federally funded) math and science programs to Baseline.
- (f) Time Time was a factor. Our schedule was tight, but these are constraints that a major school district must work around in any simultaneous curriculum revision effort. Aside from all the problems mentioned above, the data received from the teachers indicates that they felt that the effort was worthwhile. Teachers are excited about an all out emphasis toward a basic curriculum in which all disciplines can interact. They look forward to eventually having a guide to ideas and resources that will enable students to achieve the mastery objectives.